To: Stephanie Vaughn/R2/USEPA/US@EPA[]

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From: "Willard Potter"

Sent: Fri 7/13/2012 4:54:39 PM

Subject: EPA Questions Re HV CWCM QAPP and Sampling Equipment

Stephanie:

Please see the responses to EPA/CDM questions regarding the High Volume CWCM QAPP and sampling equipment. Original questions listed and the responses follow in bold font.

Analytical Details Needed:

· Confirm that the dynamic and static spikes added to the PUF are those listed in the SOPs (list of label compounds and concentration of dynamic and static spikes)?

The dynamic and static spikes used in the HV sampling are listed in the SOPs. Specifically, the Static Spike is added to the PUF and the Dynamic Spike is added mid-stream during sampling.

· What are the dimensions of PUF and the manufacturers catalog number?

The PUF chamber is 1.5 x 3 inches and can be ordered from Tisch Environmental; part number TE-1015.

· Will the front and back end (breakthrough cartridge) of PUF be included in the dissolved-phase concentration? And will they be extracted/analyzed together or separately?

The CPG is currently using only one PUF per sample. The PUF is analyzed as one sample and is not split front to back.

· Will the laboratory be splitting the extract or fractionating on column? Since splitting the extract doubles the detection limits, there is currently no plan to split the extract.

AP does analyze fractions for different analyte groups, and this is done as a result of cleanup, not during cleanup.

· What is the size of the 25 μ m GFF filter (diameter)?

142 mm diameter.

· What is the process for coagulating the Vortex chamber water (coagulant manufacturer catalog number and amount)?

AP uses Agilent Technologies Chemtube Hydromatrix, part #198003; it is cleaned in house before use. As needed, AP can send the MSDS or Cert of Analysis. The amount used per sample varies depending on the amount of water in that sample. In most cases AP use around 10 grams for a 10 gram sample, but will add more to a really wet sample, maybe 15-20 grams.

General planning and document review questions:

· Will CPG be providing the PUFs and glass fiber filters for the split samples?

The CPG has not discussed, in detail, the logistics of the split samples.

· What was the volume of XAD and the PUF size (if different than above) used in the PUF vs. XAD

study?

Approximately 60g of XAD was used.

· May we forward the following documents to the split sample laboratory?

Analytical Perspectives is agreeable to sharing the information below, but AECOM would like to note that AP and Gravity paid for the PUF vs. XAD study, and that the SOP includes some innovations that AP developed.

o The PUF vs. XAD study

Yes.

o Analytical SOPs for PUF analyses for comparison to split sample laboratory procedures

Yes.

o Relevant QAPP worksheets for QA/QC criteria limits and detection limits

Yes.

o PUF sampling SOP

Yes

Please let us know if there are additional questions. We will be discussing the question re providing HV sampling materials with the clients next week.

Have a great weekend!!

Bill P.